



SIGNIFICANT ISSUES OF FINANCIAL LITERACY AND APPLICATION IN THE STOCK MARKET: A DESCRIPTIVE STUDY ON BANGLADESH CAPITAL MARKET

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ABSTRACT

Lagging behind of financial knowledge, investors are not able to furnish and utilize their invested fund in the stock market. The complexity and advancement of current financial markets as well as instruments, investors should have financial knowledge in everyday life, such as comparing different financial instruments, deciding how much to save, when and where to invest, when and where to get the financing and other financial matters. Furthermore, the needs for Financial Literacy have become increasingly significant with the globalization and the easier access to financial markets as well as the rapid growth in diversified financial products. The study aims to provide financial literacy knowledge and how to apply the knowledge into the capital market. The literature identifies that the primary literacy level is not so satisfactory. An individual with less financial knowledge has more negative opinion about finances and makes more incorrect financial decisions. As a result, they are detached from embracing innovative financial products, making sound financial planning decisions and participation in the stock market. It also objects to define the financial literacy character and suggest to involving into the stock market.

1. Introduction

The advent of diversified financial products and services caused complexity of financial decisions and challenges for economic and financial activities. As well individuals have become increasingly active in financial markets and market participation has been accompanied by market dynamism. To make balance between product diversification and market dynamism, an individual's ability to manage his personal finance has become a tricky issue. Turn into a developing country, the financial literacy knowledge is not completely new for the investors. But it becomes a fact when investors do not behave like a financially literate one. In the age of globalization financial markets are more diversified and dynamic. Consequently, the study has remarked a significant move to understand financial literacy knowledge of individual investor and their application through stock market participation.

In developed countries (OECD to be precise), there is greater focus on educating an average family- helping it balance its budget, build assets, save for children's education and retirement planning. FL there takes the form of guiding consumers through the maze of complex financial products, taking confident financial decisions and safeguarding their financial interest, and resisting marketing pitches of financial companies by asking the right questions.

From the evidence of OECD report, it is said that if the investors are not aware of the risk and return of their investments, they often involve themselves with risky speculations and rumor-base decision making. As a result, not only the retail investors incur huge losses but also damages the basic structure of the market, because our market is still dominated by the retail investors. So, to have and retain them as well as to increase their participation, both financial education and financial inclusion are required.

The study aims to understand the significance of providing financial literacy knowledge and to identify the factors which affect stock market participation. In addition, the study concentrates to identify the financial knowledge indicators and analyze the relationship between investment and financial knowledge.

2. Literature Review

The financial literacy concept registered an evolution with time and place, rendering difficult to find a common definition. Financial literacy has been studied in many countries from different aspects. Most of the study focused on measuring literacy and its impact on investment decisions but few of those clarify the exact meaning and application of financial literacy. The present study initiates to understand that what exactly meant by financial literacy and how investor can apply it to take safe investment decision in stock market.

The working definition of FL given by the Organization for Economic Co-operation and Development, 2005 (OECD) is that, it is a combination of awareness, knowledge, attitudes and behavior necessary to make sound financial decisions and

ultimately achieve individual financial wellbeing. They develop two indices of financial literacy and knowledge, which allow differentiating among different levels of financial sophistication and measuring financial knowledge. While Remund noticed that since 2000 the literature on financial literacy has focused on five domains, notably the knowledge of financial concepts, ability to communicate about financial concepts, aptitude in managing personal finances, skill in making appropriate financial decisions, and confidence in planning effectively for future financial needs, McKay mentioned that no one indicator or domain may be used alone to have an idea about the global financial capacity of a person. In support of these findings, the study discusses the importance of financial literacy and the indicators to identify the financial literate one in the stock market.

Increasing consumer financial literacy is a public policy objective to improve welfare through better decision making (U.S. House of Representatives, Financial Services Committee 2009). The significance of FL in financial decision making as highlighted in the report of The World Bank include: i) helps to prepare consumers for tough financial times, by promoting strategies that mitigate risk such as accumulating savings, diversifying assets and purchasing insurance. ii) reinforces behaviors such as timely payment of bills and avoidance of over-indebtedness which help consumers to maintain their access to loans in tight credit markets. More financially literate consumers increase the demand for, and responsible use of, financial services, help to underpin financial market stability, and contribute to wider economic growth and development. iii) critical for promoting access to finance by creating incentives and environment that promote desired financial behaviors such as saving, budgeting or using credit wisely. Financially savvy consumers are more likely to save their money, compare financial products and services and discuss financial matters with their families.

More than a decade ago research interest on FL has been developed in which researches had mainly been conducted for developed countries such as in the United States of America (USA) and the United Kingdom (UK). In Australia, the first study measuring the FL of Australians was conducted in 2004 by the Commonwealth Bank Foundation, in collaboration with universities and research institutes. The Foundation had commissioned the research to investigate people's ability to make informed and responsible financial decisions and analyzed the relationship between FL and its impact on individuals. In this regard, The International Forum for Investor Education (IFIE), a unique alliance chartered in 2005 that brings together private sector and public sector providers of investor education to improve the effectiveness of investor education programs around the world.

Besides focusing on FL level, studies in the area also examine factors that influence the level. For instance, using US data, Hogarth (2002) explores the FL of adults on topics related to personal finance. The study shows that, in general, less financially knowledgeable respondents are more likely to be single, relatively uneducated, low income, minority and either young or old (not middle aged). Another study by Worthington (2006) on Australia also, uses logit regression models to predict FL of the Australian adults. Results of the study suggest that FL is found to be highest for persons aged between 50 and 60 years, professionals, business and farm owners. FL is the lowest for unemployed, females and those from non-English speaking background.

Recently Bangladesh Bank and BSEC has taken some financial literacy project plan and going on process to implement but few surveys, training programs provide data on financial literacy factors and application of those knowledge in financial decision making. A diverse financial education initiative has been undertaken in a rigorous manner by Bangladesh Bank across the country from 2014.

The present work is accordingly giving effort to identify significant issues of FL that ensure individual's effective financial plan and investment decisions.

3. METHODOLOGY

3.1 Research Design:

Descriptive research design is used to describe the characteristics of a population being studied in this research. It generally precedes explanatory research by defining the financial literacy of the individual investors of Bangladesh Capital Market. Main purpose of the research is to describe the data and characteristics about what is being studied.

3.2 Sample Design:

The area of study covered one wings of Bangladesh Capital Market is CSE. It considers the information of demographic and economic character of the population. Individuals are 100 in numbers are considered as respondent varies from age of 30 to 75 including male and female. Selection of individuals is firstly done from the records of CSE randomly. The research also followed by a semi-structured interview with the individuals and qualitative data derived from the financial statements of companies.

3.3 Data Collection:

A semi-structured questionnaire was developed for the study and analysis of financial literacy knowledge and participation of the individual investors of CSE. The questionnaire consists of the primary and very basic level of financial knowledge of the individual followed by the CSE guidelines and quiz questions. It also utilizes the question pattern and information from the Organization of Economic Cooperation Development (OECD) results of 2007, and 2012 survey based on the questionnaire provided by the organization. It focused the main aspects as FL as investors' knowledge, attitudes and behaviors. For financial knowledge some questions have been designed to test for this aspect covering different phases of knowledge; basics of cash flow, interest rate, types of market, types of economy, financial instruments,

time value of money, risk-return, inflation and diversification. These are also related to the knowledge on the basic concepts of investment. So, these questions may be considered adequate enough to judge an individual's basic knowledge. The response of these questions will facilitate to follow the components of financial literacy which may guide individuals to participate in the stock market.

In addition, the study emphasized on the secondary data sources as journals, annual reports of DSE & CSE, stock exchange database, newspaper, circulars, brochures & booklets, economic survey and annual survey of CSE, director's report, notes to the accounts in the form of short qualitative information and company websites etc.. Moreover, the study used some developed and developing country's report where the researcher emphasized on the theoretical aspects of financial literacy.

4.Data Analysis and Results

4.1 What is Financial Literacy?

The literature often uses three terms- financial literacy, financial education and financial capability- whose overlap can cause confusion. They are, however, distinct pieces of a puzzle, parts of the whole, or steps towards the goal of financial inclusion. Financial literacy can broadly be defined as "providing familiarity with an understanding of financial market product" s, especially rewards and risks, in order to make informed choices. From this standpoint, financial education relates to personal finance to enable individuals to take effective action to improve their financial wellbeing and avoid distress in matters that are financial. As the definition given by the investorwords.com, investment is the process of purchase of financial instruments or other items of value with an expectation of favorable future return. Similarly saving is being defined as the approach by which the money is kept aside for having a return expectation in future comparatively lesser in comparison to investment.

4.2 Importance of Financial Literacy

Financial literacy is the prerequisite to be involved in the capital market for any kind of investors. And investors perform the significant role in the capital market. So, the investment awareness and financial literacy has always been a very significant approach for informed financial decision-making process for every person. The literacy not only encompasses the approach to understand a basic financial instrument but also involves the complex process by which an investor selects a particular financial product on the basis of their future financial goals. With the changing developments and inculcation of the Capital market and financial wellbeing as a part of school curriculum and financial inclusion reform by Government of Bangladesh, it is inherently felt to review and analyze the investment behavior and must arrange training program, seminar and workshop to make individual investor financially literate one. Besides, the information asymmetry between the markets and investors is becoming increasingly difficult to make informed decisions. Thus, financial literacy is considered an important adjunct for promoting financial inclusion and ultimately financial stability.

On the other hand, one of the major impediments of our capital market is that our retail investors are not aware of the risks associated with the market. If the investors are not aware of the risks, they often involve themselves with the risky speculations and rumor-based decision making. In this context financial education is the process of building knowledge, skills and attitudes to become financially literate. The role of financial education is to enable people to shift from reactive to proactive decision-making and work towards fulfilling their financial goals.

4.3 Components of Financial Literacy

Financial literacy is the convergence of financial, credit and debt management and the knowledge that is necessary to make financially responsible decisions that are integral to our everyday lives. Study reveals that most of individual investors are not knowledgeable regarding financial issues before going to investment. The higher financial literate are more likely to plan for future, have an emergency fund and be less likely to engage in expensive credit behavior. The present write-up initiates to understand the exact meaning of financial literacy and why it is important to learn to be a participant in the stock market. In this regard the study identifies the following five significant components of financial literacy knowledge that is must learn by the investors before stock market participation, as: Budgeting basic; impact of interest and saving criteria.

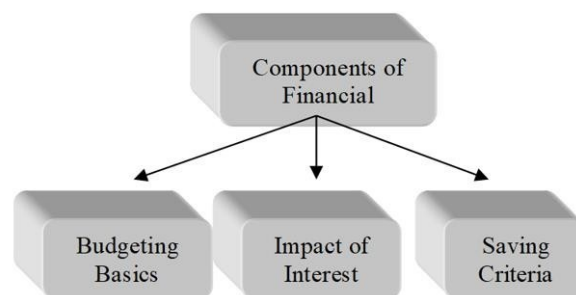


Figure 1: Components of Financial Literacy (Source: Researcher's own)

The mentioned components are the indicators of knowing how money is made, spent and saved as well as the skills and ability to use financial resources to make protected decisions. It is noted here financial literacy report indicates that retail investors in the stock market do not have the primary level of literacy knowledge regarding financial matters. Investment skill is vitally important which must be assured by financial knowledge. Yet, a large portion of individual investors are lagging behind of basic knowledge and consequently are unable to make profitable and safe investment decision.

Budgeting

Budgeting practices are very much basic and essential for individual's financial plan. It will ensure to protect overextending cost or falling into extreme debt or bankruptcy. Budgeting is also maintaining steady financial condition of individuals. Most of the retail investors in CSE invest their fund based on rumor without having any prior plan to sustain for long run investment. It also becomes harmful for the capital market.

Impact of Interest

Interest is one of the major components of financial plan. Unfortunately, the analysis shows that the respondent have less basic concept regarding earning and paying interest of financial products in the stock market. They have no idea about simple interest and compound interest.

Saving

Saving today for tomorrow is a fundamental understanding. Saving is considered as the pillar of financial system as well as individual investors. It will not create money without the proper utilization of saved money. Amount of saving depends on the nature of service and income level. But individuals must have the plan and determined that how much they have to save on regular basis.

Equipping the individual with the financial knowledge is the best way to make informed choices about their financial future.

All investors are requested to make their investment decision on the basis of financial strength of the companies not on the basis of rumor. It is not wise to invest in the capital market without having proper information, detail knowledge and experience regarding different aspects and nitty-gritty of the capital market.

It is observed that in the context of the present condition of the capital market, many small and new investors are involved in the capital market which is undoubtedly encouraging. But it is a matter of concern that a portion of these investors without having proper, timely and detail knowledge and reviewing/analyzing the information of the different aspects of the capital market are being attracted in investing on the basis of rumor, hearsay and different comments from different quarters, which may make their hard earned capital risky, as a result, it will not only hamper the confidence of these investors but may also create hindrance of the continuity and firm growth of the capital market.

4.4 Indicators of Financial Literacy Knowledge

Financial education is an important tool to address the imbalance between less experienced customers and the diversified products and help customers both accept and use the products to which they increasingly have access. It can help clients to develop skills to compare and select the best products for their needs and empower them to exercise their rights and responsibilities in the customer protection equation. According to IOSCO, a smart investor is expected to resort to an investment which should be SMART means Specific, Measurable, Achievable, Realistic and Time-bound. Only a smart investor can conduct research on a product before investing. On the other hand it is difficult (may not be possible) for general investors and here also lies the importance of investor education. A smart investor must understand the "return on investment" (ROI) and "return of investment". In this phase, the research aimed to identify the key indicators of investor's literacy on financial terms. The study investigates the following fundamental factors that must be the key indicators of financial literacy knowledge of the initial investor:

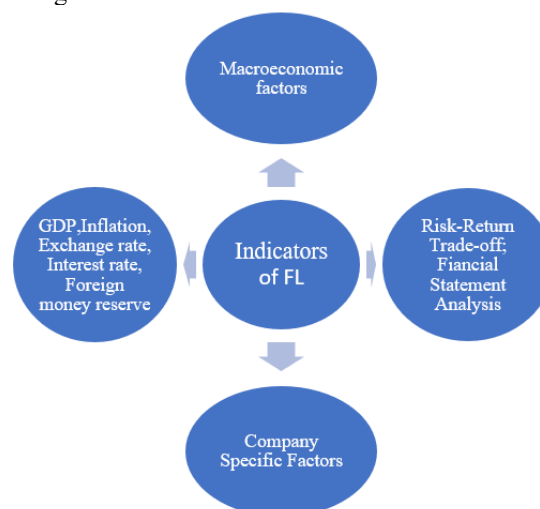


Figure 2: Indicators of FL. Source: Researcher own

Macroeconomic Factors

Macroeconomic variables play an important role in the performance of stock market returns. The impact of macroeconomic variables on stock market returns has generated a lot of interest in the financial market literature. It indicates the relationship between macroeconomic variables and stock prices which has been extensively studied in developed capital markets. On the other hand, it is highly recognized that stock markets play a pivotal role in growing industries and commerce of a country that eventually affect the economy.

Besides this the rapid transformation of economic structure, policy and institution on a global scale in the recent past, the role of capital markets as intermediary between investor and entrepreneur is getting increasing importance in developing economies. As a result the needs of SMART investors become an important question for the capital markets. Understanding the affect of macroeconomic factors change investors attitude towards markets and the capital market will be benefitted from that perspective.

The stock market avail long-term capital to the listed firms by collecting funds from various potential investors, which allow them to expand in business and also offers investors alternative investment avenues to put their surplus funds in (Naik and Padhi, 2012). It is very interesting to invest in stock market but also a very risky trench of investment. So, potential investors always try to guess the movement of stock market prices to achieve maximum benefits and minimize the future risks. By concerning with the relationship between stock market returns and macroeconomic variables, investors might guess how stock market behaved if macroeconomic indicators such as exchange rate, industrial productions, interest rate, consumer price index and money supply fluctuate (Hussainey and Ngoc, 2009). Macroeconomic indicators such as compositions of data which are frequently used by the policy makers and investors to gathering knowledge for current and upcoming investment priority (Masuduzzaman, 2012).

Thus the macroeconomic volatility on stock returns is based on the transmission mechanism of leading macroeconomic variables, namely; inflation, exchange rate, interest rate, money supply, industrial production, foreign remittance, GDP is predominantly important in selecting financial instrument of capital market and makes safe investment.

Company Specific Factors

Financial health is one of the best indicators to judge the company's potential for long-term growth. Financial knowledgeable only can analyze the company and make safe financial decisions in the long run i.e. capital market. The first step toward improving financial literacy is to conduct a financial analysis of proposed investment opportunity and compare risk-return factors. Company specific factors considered here the micro variables like market price/earnings, growth rate in market capitalization, dividend payout and dividend yield, debt to equity etc.

Risk-Return Trade-off

Risk and return are two important criteria of making investment decisions. They have cause and effect relationship which significant, linear and positive. Based on this implicit relationship, all valuation models and theories have been developed. These are two important keys to the effective investment decision. So, Investors have to know them, know how to measure, know how to use and know how to earn and manage on a continuous basis.

Financial Statement Analysis

Financial Statement shows a company's overall performance. It is the best analysis to value a firm or organization. A smart investor should have a clear idea regarding the components of financial statement and how to analyze the variables which have significant effect on choosing capital market instruments. Knowledge regarding the following ratios can judge an investor's financial literacy level:

Earnings per Share (EPS)

Before purchasing a share of investor should understand earnings per share of that company. EPS is basically the profit (earning) that a company has made over the last year divided by how many shares are on the market.

Price Earnings Ratio (PER)

Price Earnings ratio is the best known of the investment valuation indicators. The P/E ratio means investors are paying more for today's earnings in anticipation of future earnings growth. It is the most widely reported and used valuation by investment professionals and the investing public. Investors should understand that a high P/E ratio means investors are paying more for today's earnings in anticipation of future earnings growth.

Price Earnings Ratio to Growth Ratio (PEG)

The ratio indicates that how company's earnings grow (company's projected growth) in relation to the price earnings ratio. It informs the investor whether a stock may or may not be a good value.

Dividend Payout Ratio (DPR)

The dividend payout ratio helps the investor to inform that how much profit goes out in dividends. It identifies the percentage of earnings (net income) per common share allocated to paying cash dividends to shareholders. It is an indicator of how well earnings support the dividend payment of respective companies.

Dividend Yield (DY)

A stock's dividend yield is expressed as an annual percentage and is calculated as the company's annual cash dividend per share divided by the current price of the stock. It is often found in the display of stock quotes for dividend-paying companies.

Financially the study summarizes that literate investor should have the detailed idea and analysis on the company specific factors named as microeconomic variables. Without having the capacity to analyze the financial factors, investors cannot choose the best portfolio and failed to ensure safe investment.

4.5 Application of Financial Literacy in Stock Market

Capital Market plays a significant role in the economy as a source of long-term financing. A fair, efficient and transparent capital market is essential in a country for its industrialization and economic development. Although Bangladesh capital market has around 3.0 million investors, most of the investors are marginal and in lack of proper literacy. They make investment decisions mostly on rumors, intuitions and emotions as they are unable to interpret the information disclosed in the financial statements and other sources. It gives rise to information asymmetry in the market. Besides, they rely on behavior of some large investors to make investment decisions. It gives manipulators an opportunity to exploit mass investors. All these phenomena result in adverse investment decision in our capital market. Making their decisions on rumors, emotions and intuitions, most of the investors jeopardize not only their own future but also the stability of capital market and the economy of the country. In the light of this instance, the study gone through the discussion of financial instruments is available to the investors and how investors behave in managing their funds.

Financial Literacy and Investment

Financial Literacy is the prerequisite of taking investment decision. The more financially literate person can mobilize their fund smartly in the competitive financial markets. They can take investment decision on the basis of company's financial strength not on rumor. They have the proper information, detail knowledge and experience related to different aspects and nitty-gritty of capital market.

Investment defined as the commitment of funds to financial and real assets or other resources in the expectation of some future benefit. Two main classes of investment are fixed income investment and variable income investment. Investor can invest in fixed income as bonds, fixed deposits, preference shares and financial derivatives; in variable income as business ownership (equities) or property ownership. Investment can be also in financial and real assets. Stock market furnished their financial products to ensure easy access to market and make investment. To be a participant in the stock market investors should have adequate knowledge regarding financial products.

Individual's Participation in Stock Market

Capital market is a volatile market and risky one also. Investors should research on financial products and intends to

- *Minimize risks*
- *Maximize returns and*
- *How to deal with fluctuations and changes.*

Analysis based on the above factors' investors can invest into common stock, preference share and bond, and financial derivatives as option on stock index, stock index futures, mutual fund and exchange-traded fund. The following chart shows various types of capital market instruments.

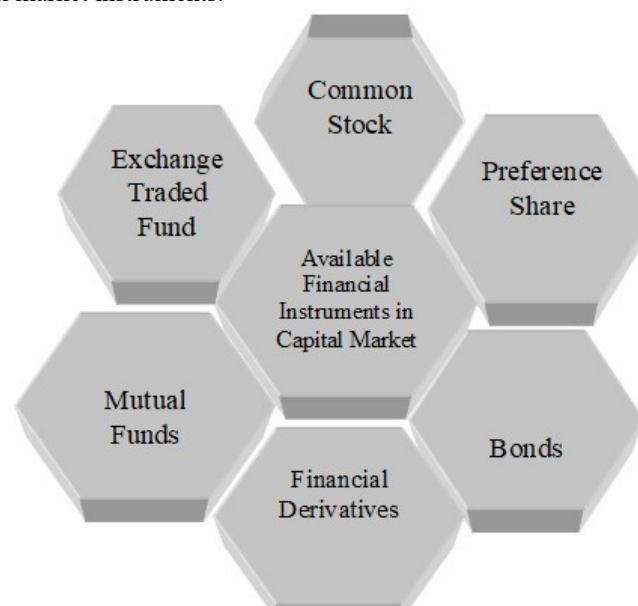


Figure 3: Various types of financial instruments in capital market

Mass people do not have adequate knowledge regarding the instrument's price; risk; return; inflationary effect; earnings per share and how to measure interest rates and possible lost their funds in the financial markets.

5. Discussion and implications

Awareness with the idea of saving and investing, and knowledge concerning shares, mutual funds, stock exchanges, and various forms of deposits can help a person to deal with financial inconveniences more strongly than others. Sound financial literacy can not only help people at a personal level, but it will also benefit the nation as a whole resulting in a more efficient and flexible economy.

The study recommends from the individuals' points that they must have a financial plan that requires an in-depth analysis of financial matters through training and research. Bangladesh Govt. and BSEC also have taken the initiative for launching financial literacy program as part of its master plan to make people literate on financial instrument. They suggest applying the concept of financial literacy from the very root level education i.e. at the level of school. Finally, it recommends that it is necessary to impart financial literacy among the poor people in rural and urban areas not only to be a participant in the capital market but also can make their living cost and efficient handling of financial matters in their everyday life.

6. Conclusion

Capital Market of Bangladesh is dominated mostly by the retail investors. Most of them are lagging of financial literacy knowledge. Government and BSEC already have taken so many steps to increase the financial literacy and individual's participation. As well investors need to contribute huge effort and involvement of every literacy programs as seminar; workshop, training and research of the financial products in the capital market. The tried to shed light on some important aspects of the financial literacy and encourage the individuals to be smart investors and contribute to the country economy. Moreover, expanding the financial literacy programs can play a fundamental role in restructuring a sustainable financial system by bringing all people to the mainstream economy.

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Appendix: Glossary of the Abbreviations used

Terms	Meaning of the Terms Used
FL	Financial Literacy
BSEC	Bangladesh Securities and Exchange Commission
BB	Bangladesh Bank
OECD	Organization for Economic Co-operation and Development
CSE	Chittagong Stock Exchange
DSE	Dhaka Stock Exchange
SEC	Securities and Exchange Commission